

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An image display device comprising:

a light source;

a display panel disposed in front of said light source and having a plurality of pixel sections in the form of a matrix, each of said pixel sections including a first pixel for displaying an image for a first viewpoint and a second pixel for displaying an image for a second viewpoint, said second pixel being disposed at a position apart from said first pixel in a first direction; and

an optical unit disposed in front of said display panel for deflecting light emitted from said first and second pixels ~~in the first direction~~,

wherein each of said first and second pixels includes a transmissive region for transmitting the light emitted from said light source to said optical unit and a reflective region for reflecting ~~an exterior light incident on a front side of said display panel from the front to~~ said optical unit, and wherein said transmissive region and said reflective region are arranged in a second direction perpendicular to the first direction in each pixel,

wherein said transmissive regions in said pixel sections are arranged in a line in the first direction, and said reflective regions in said pixel sections are arranged in a line in the first direction, and lines of said transmissive regions and lines of said reflective regions alternate repeatedly in the second direction, and

wherein said optical unit is a lenticular lens in which a plurality of cylindrical lenses is arranged such that a geometric axis of each cylindrical lens is substantially aligned with a space

between the first pixel and the second pixel of at least one pixel section, and the geometric axis of said cylindrical lens extends along said second direction.

2. (canceled).

3. (currently amended): ~~An image display device according to Claim 1,~~ An image display device comprising:

a light source;

a display panel disposed in front of said light source and having a plurality of pixel sections in the form of a matrix, each of said pixel sections including a first pixel for displaying an image for a first viewpoint and a second pixel for displaying an image for a second viewpoint, said second pixel being disposed at a position apart from said first pixel in a first direction; and

an optical unit disposed in front of said display panel for deflecting light emitted from said first and second pixels,

wherein each of said first and second pixels includes a transmissive region for transmitting the light emitted from said light source to said optical unit and a reflective region for reflecting exterior light incident on a front side of said display panel to said optical unit, and wherein said transmissive region and said reflective region are arranged in a second direction perpendicular to the first direction in each pixel,

wherein said transmissive regions in said pixel sections are arranged in a line in the first direction, and said reflective regions in said pixel sections are arranged in a line in the first direction, and each said line of said transmissive region and each said line of said reflective region alternates repeatedly in the second direction, and

wherein said optical unit is a parallax barrier in which a plurality of slits is arranged in the first direction, ~~said slits being formed for each line in which said pixel sections extend in the second direction corresponding to such that a longitudinal direction of each slit is substantially aligned with a space between the first pixel and the second pixel of at least one pixel section, and~~ the longitudinal direction of said slit extends along said second direction.

4. (currently amended): An image display device comprising:

a light source;

a display panel disposed in front of said light source and having a plurality of pixel sections in the form of a matrix, each of said pixel sections including ~~at least a~~ first pixel for displaying an image for a first viewpoint and a second pixel for displaying an image for a second viewpoint, said second pixel being disposed at a position apart from said first pixel in a first direction; and

a parallax barrier interposed between said light source and said display panel, said parallax barrier being formed by arranging a plurality of slits for deflecting the light emitted from said light source ~~in the first direction, in which case, said slits are disposed in each line of said pixel sections extending in a such that said slits are disposed with respect to each line of said pixel sections and extend in a~~ second direction perpendicular to the first direction, said second direction being the longitudinal direction of said slits,

wherein each of said first and second pixels includes a transmissive region for transmitting the light emitted from said light source and passed through slits of said parallax barrier to the front and a reflective region for reflecting ~~the exterior light incident from the front~~

~~to the front~~ on a front side of the display panel, and wherein said transmissive region and said reflective region are arranged in the second direction in each pixel, and

wherein said transmissive regions in said pixel sections are arranged in a line in the first direction, and said reflective regions in said pixel sections are arranged in a line in the first direction, and each said line of said transmissive region and each said line of said reflective region alternates repeatedly in the second direction.

5. (original): An image display device according to Claim 1, wherein each of said transmissive region and said reflective region is divided into a plurality of sub-regions for color different from each other, and sub-regions for the same color are arranged along the first direction.

6. (original): An image display device according to Claim 4, wherein each of said transmissive region and said reflective region is divided into a plurality of sub-regions for color different from each other, and sub-regions for the same color are arranged along the first direction.

7. (original): An image display device according to Claim 1, wherein each of said transmissive region and said reflective region is divided into a plurality of sub-regions for color different from each other, and sub-regions for the same color are arranged along the second direction.

8. (original): An image display device according to Claim 4, wherein each of said transmissive region and said reflective region is divided into a plurality of sub-regions for color different from each other, and sub-regions for the same color are arranged along the second direction.

9. (original): An image display device according to Claim 5, wherein each of said at least one transmissive region and said at least one reflective region is divided into a red sub-region, green sub-region and blue sub-region.

10. (original): An image display device according to Claim 1, wherein said display panel is a liquid crystal display panel.

11. (original): An image display device according to Claim 1, wherein said first direction is a horizontal direction of a display plane.

12. (original): An image display device according to Claim 11, wherein said image for said first viewpoint is an image for the left eye and said image for said second viewpoint is an image for the right eye which has a parallax with respect to said image for the right eye to thereby provide a three-dimensional image.

13. (original): An image display device according to Claim 1, wherein said first direction is a vertical direction of a display plane.

14. (original): A portable terminal device including said image display device according to Claim 1.

15. (original): A portable terminal device according to Claim 14, wherein said portable terminal device is any one of a cellular phone, portable terminal, PDA, game device, digital camera and digital video camera.

16. (currently amended): A display panel comprising a plurality of pixels in the form of a matrix, wherein:
each pixel includes a transmissive region for transmitting light and a reflective region for reflecting light,
each of said transmissive region and said reflective region is divided into a red sub-region, a green sub-region, and a blue sub-region, and wherein
the array direction of said transmissive region and alternates with said reflective region along a first array direction, and
is the same as that of said red sub-region, said green sub-region, and said blue sub-region in each pixel alternate with each other along the first array direction.

17. (previously presented): The image display device of claim 1, wherein an area of the transmissive region is equal to an area of the reflective region.

18. (previously presented): The image display device of claim 4, wherein an area of the transmissive region is equal to an area of the reflective region.

19-20. (canceled).

21. (new): A three-dimensional image display device comprising:

a light source;

a display panel disposed in front of said light source and having a plurality of pixel sections in the form of a matrix, each of said pixel sections including a first pixel for displaying an image for a first viewpoint and a second pixel for displaying an image for a second viewpoint, said second pixel being disposed at a position apart from said first pixel in a horizontal direction; and

an optical unit disposed in front of said display panel for deflecting light emitted from said first and second pixels in the horizontal direction,

wherein each of said first and second pixels includes a transmissive region for transmitting the light emitted from said light source to said optical unit and a reflective region for reflecting exterior light incident on a front side of said display panel to said optical unit, and wherein said transmissive region and said reflective region are arranged in a vertical direction perpendicular to the horizontal direction in each pixel.

22. (new): A three-dimensional image display device according to Claim 21, wherein each of said transmissive region and said reflective region is divided into a plurality of sub-regions for color different from each other, and sub-regions for the same color are arranged along the horizontal direction.

23. (new): A three-dimensional image display device according to Claim 22, wherein said transmissive regions in said pixel sections are arranged in a line in the horizontal direction, and said reflective regions in said pixel sections are arranged in a line in the horizontal direction, and each said line of said transmissive region and each said line of said reflective region alternates repeatedly in the vertical direction.

24. (new): A three-dimensional image display device according to Claim 22, wherein said optical unit is a lenticular lens in which a plurality of cylindrical lenses is arranged in the horizontal direction, said cylindrical lenses being disposed in each line in which said pixel sections extend in the vertical direction corresponding to the longitudinal direction of said cylindrical lens.